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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/759,586

01/15/2004

N. Geoffrey Greenberg

03-1097

8007

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12/07/2006

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

EXAMINER

HURLEY, SHAUN R

ART UNIT

PAPER NUMBER

3765

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/759,586  
Filing Date: January 15, 2004  
Appellant(s): GREENBERG, N. GEOFFREY

MAILED  
DEC 07 2006  
Green 2700

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David M Frischkorn  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 23 August 2006 appealing from the Office action mailed 24 March 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2003/0226347

Smith et al

12-2003

Hatch, Kathryn L TEXTILE SCIENCE, 1st edition (1993), page 294

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch (Textile Science) in view of Smith et al (2003/0226347).

Hatch teaches a 2-ply yarn comprising two staple spun yarns of natural or synthetic fibers, the single yarns twisted in a direction opposite to that of the plied yarn (Figure 24.4, Plied Spun Yarns). While Hatch essentially teaches the invention as discussed above, he fails to specifically teach a twist difference of greater than 4 tpi, which Smith teaches (paragraph 29). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize such a tpi, so as to achieve the composite benefits of both a hard twist yarn, and a soft twist yarn.

In regards to having more than 6 tpi, Applicant provides no reasoning as to why such a number is unknown and unobvious, and without evidence of unexpected results, such a number is considered obvious over the 5 tpi difference taught in the prior art. The ordinarily skilled artisan teaches what Applicant considers inventive, mainly, a tpi difference above and beyond 3, and as such, the ordinarily skilled artisan would have known to use 6 tpi difference, so as to maximize the composite qualities of the yarn.

In regards to staple lengths of less than 2 inches, and deniers of 1.5, both are well known qualities of the fibers taught by Hatch, and obviously taught. Likewise, Applicant teaches that the single yarns inherently will have a weaker tensile strength due to their over twisting.

**(10) Response to Argument**

Applicant argues on page 4 that Examiner has overlooked Hatch's teaching that a plied composite of individual twisted yarns should be balanced. Examiner strongly disagrees. Nowhere does Hatch state that a plied composite should be balanced. All Hatch does is describe what a balanced yarn is. For Applicant to take this definition out of context, and attempt to apply it to any and all plied yarn situations is unfortunate. Hatch never requires the plied yarn to be balanced. All he teaches, and is relied upon, is to teach the basic plied yarn structure as claimed by Applicant, and as is well known in the art. Even applicant admits that plied yarns are well known in the art. In fact, all Applicant really claims as his inventive step is the unbalanced twist which he states from page 6 line 18 - page 7 line 8. To show that such an unbalanced configuration is well known in the art, Examiner cited Smith which specifically teaches a tpi of between 1 and 6. Specifically in paragraph 29, if the substrands are twisted together at 6 tpi, without twisting them beforehand (see paragraph 29, lines 13-16), then there most certainly will be a twist differential of greater than 4 tpi. And in relation to one another, there most certainly could be a difference in twist direction given that all yarns have some residual twist contained therein, and when twisted together, the twist direction of the substrand could be opposite to that of the twisted strand itself. In essence, Smith most certainly teaches a scenario which reads upon Applicant's claims as written, when considered with Hatch.

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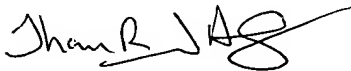
Finally, in regards to Applicant's arguments yet again concerning non-analogous art, Examiner maintains that there is no structural difference between a sewing thread and an elevator rope. Applicant provides no dimensions, no deniers, and no weight requirements. Absent some specific teaching of size, sewing thread and elevator rope are considered intended use. Examiner most certainly could make an elevator rope for a dollhouse, where sewing thread would easily provide the necessary strength. For reference, Examiner would just like to note that both elevator ropes and sewing threads are found in class 57.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



SRH

04 December 2006

Conferees:

  
Gary Welch  
Alissa Hoey